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A New Genus of Pselaphid Beetles from the Everglades

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Nearly a decade ago I received a shipment of leaf mold from the Florida Everglades, the berlesate of which contained four specimens of an undescribed genus and species of Pselaphidae. Its eventual discrimination was completed after examination of three type specimens in the LeConte Collection. I am indebted to Dr. P. J. Darlington of the Museum of Comparative Zoology, Harvard University for the privilege of studying this collection last September.

Lemelba **new genus**

Genotype: *Lemelba darisi* new species.

Euplectini having the following combination of diagnostic characters: (1) pubescence sparse, semi-erect, and conspicuous in general, and in addition, the first four tergites bear transverse rows of very long guard setae. (2) Eyes almost invisible from above. (3) Occiput deeply impressed. (4) Ventral surface of head with capitulate setae. (5) Antennal club consisting of the very large distal segment. (6) Pronotum deeply constricted near base; pronotal disc evenly convex; deep transverse antebasal sulcus ending each side in a small fovea invisible from above; a strong longitudinal carina bisects pronotum from basal bead to antebasal sulcus. (7) Each elytron bifoveate; sutural stria entire; no discal stria; elytral flank bears a subhumeral fovea and carina that parallels margin to apex. (8) Five tergites visible; first three with narrow, distinct margins; first with a pair of minute basal abdominal carinae separated by one-fifth of segmental width. (9) Six sternites in female sex, seven in male. (10) Prosternum, metasternum, tarsi, and maxillary palpi as in *Melba*. (11) Metacoxae separated by one-fourth the metasternal length.

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Lemelba davisi new species

Figure 1

Type Male. Straw yellow; pubescence translucent, sparse but arcuate, coarse, and semi-erect. In addition, the abdomen is provided with long guard setae. The first three tergites each have a transverse row of six, and the fourth tergite of four such setae. These latter are 0.06 to 0.08 mm. long, or about one-eighth of the total body length, and may function as special receptors. The integuments are smooth, polished, and subimpunctate. Body length 0.63 mm., and greatest width 0.34 mm.

Head with the eyes almost invisible from above. The eyes are actually well-formed, subcircular, each of about 20 facets, but are set at their own length from vertex. Tempora long, longer than the eyes. Occipital area broadly indented, and medianly this area has a long, narrow sulcoid impression. Vertex with a pair of small, nude foveae that are connected by an entire, angulated interfoveal sulcus. Vertex evenly convex between foveae. Frontoclypeus simple, declivous. Labrum relatively large and transverse, about as long as frontoclypeus, with its distal margin subsemicircular. This exceptionally large labrum obscures the mandibles from above. Ventral surface of head transversely tumid between eyes, and with a deep, median, gular fovea in cervicogenal sulcus. This genal area with sixteen capitulate setae.

Maxillary palpi four-segmented. First segment minute and just discernible; second pedunculate in proximal, and gradually swollen in distal half; third rounded-triangular, as wide as inflated area of second; fourth longer than second, twice as wide as third, with base subtruncate, an almost straight lateral, and a convex mesial face, the apex bearing the usual minute palpal cone.

Antennae eleven-segmented, of typical Melboid organization and figured (Fig. 1). The antennal club consists of the eleventh segment which is as long as fourth to tenth inclusive, and the apex of which bears a circle of very long setae; this apex is rounded-acute in dorsal, and strongly truncate in lateral view.

Pronotum slightly wider than head, wider than long, with an *evenly* convex disc. Lateral margins each side sharply and deeply cut by a straight, transverse, deep antebasal sulcus. At either end of this sulcus is an inconspicuous antebasal fovea that is not discernible from a dorsal view. Basal fifth of pronotum bisected by a high, laminoid median carina from basal bead to the transverse sulcus. This carina is unique in American Trimiina.

Elytra with strongly formed humeral swellings; each elytron bifoveate, the foveae nude; deep and entire sutural stria; no discal stria, but a discal

impression from discal fovea in basal fourth of elytral length. Elytral flank with a small, nude, subhumeral fovea from which extends a long carinoid line that parallels the elytral margin.

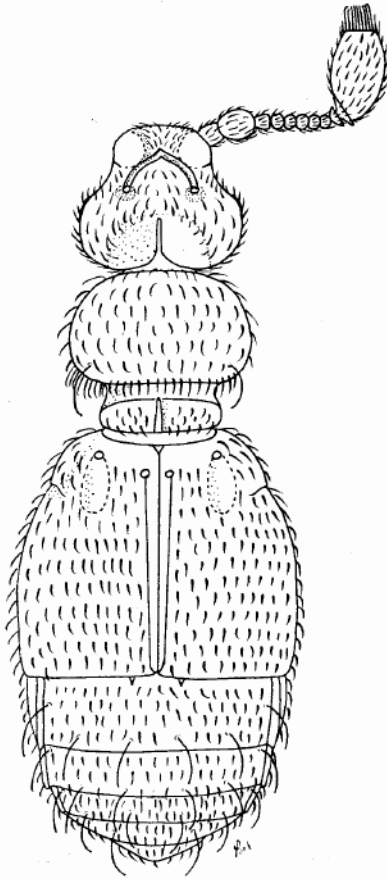


Figure 1. *Lemelba davis* new genus and new species. Dorsal aspect, x 70.

Abdomen with five visible tergites and seven visible sternites, the seventh sternite in the form of a subcircular pygidial plate. The remarkable guard setae have been described. First three tergites with narrow, well-formed margins. First tergite with a pair of minute, just discernible basal abdominal

carinae separated by one-fifth of the segmental width. First tergite longer than second. First sternite short; second twice as long as first, and longer than third, fourth, and fifth united; sixth as long as fourth and fifth united.

Prosternum not medianly, longitudinally carinate. Metasternum as long as second sternite, evenly convex, and with the margin between the metacoxae triangularly notched. Metacoxae not contiguous, but separated by a transverse distance that equals one-fourth of metasternal length. Tarsi three-segmented with minute basal segment, second segment subcylindrical and larger than third, the latter bearing an arcuate tarsal claw.

Female as for male except that (1) the femora are less inflated, and (2) there are only six sternites, the sixth as long as the second, with rounded distal margin.

Described on one male, the type, and three female paratypes in author's collection. These specimens were berlesed from a shipment of leaf and log mold collected in the Everglades, near Miami, Dade County, Florida by Dr. J. H. Davis, Jr., on October 20, 1944. The species is named in his honor.

Lemelba is structurally allied to many euplectine genera. In the Neotropical Region it is most closely allied to the Mexican *Dalmosanus* by virtue of its separated metacoxae. In the Nearctic Region its general habitus reminds one strongly of *Dalmosella*. Within the latter genus *D. simplex* (LeConte) and *D. americana* (LeConte) have the usual inconspicuous pubescence; *D. tenuis* Casey, with coarser pubescence, lacks the conspicuous guard setae. From *Dalmosella* in general, the new genus is distinct with separated metacoxae, subhumeral fovea, and bisected pronotal base. *Actium globifer* (LeConte) most nearly approaches *Lemelba* in this large genus, but *globifer* has the typical pronotum of *Actium*, with two fully visible antebasal foveae that are connected by a deeply biarcuate sulcus, and with pronotal margins that are not incised but simply arcuate near basal fourth. From all of these and allied genera *Lemelba* is unique in the combination of guard setae on the abdomen, bisected basal fifth of pronotum, deeply incised pronotal margins and straight antebasal sulcus, no distal elytral stria, but a subhumeral fovea and associated longitudinal carina on the elytral flank, and separated metacoxae.